

Fig. 1A

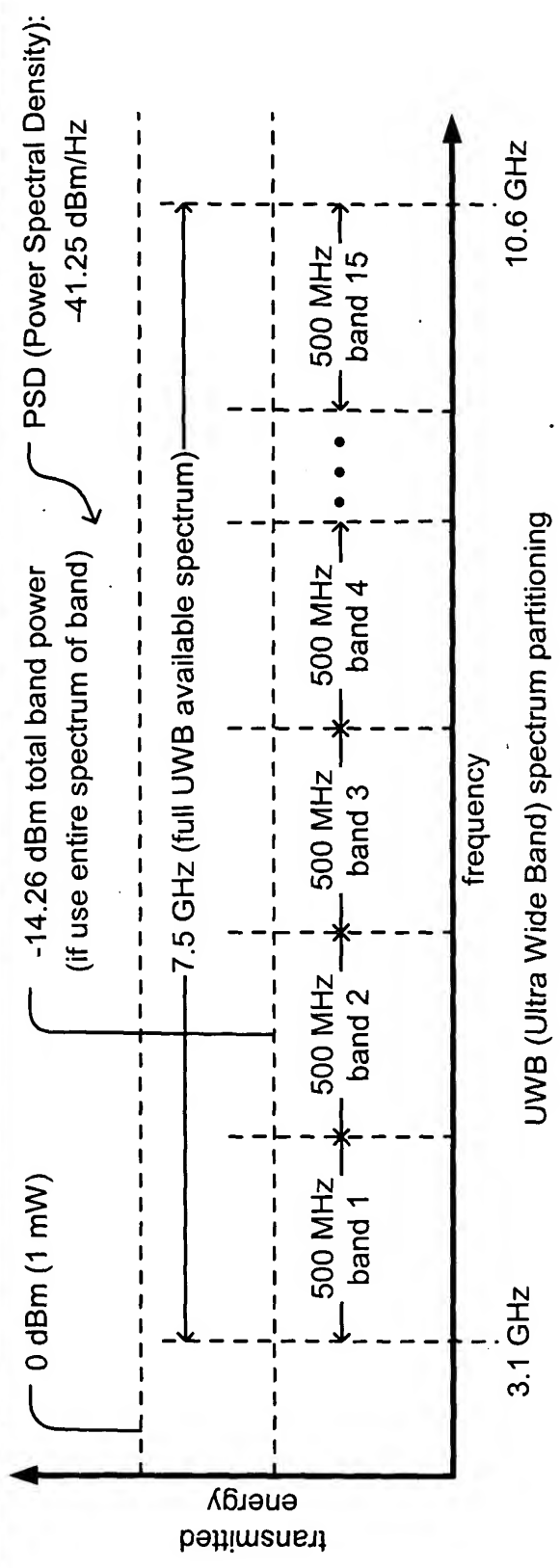
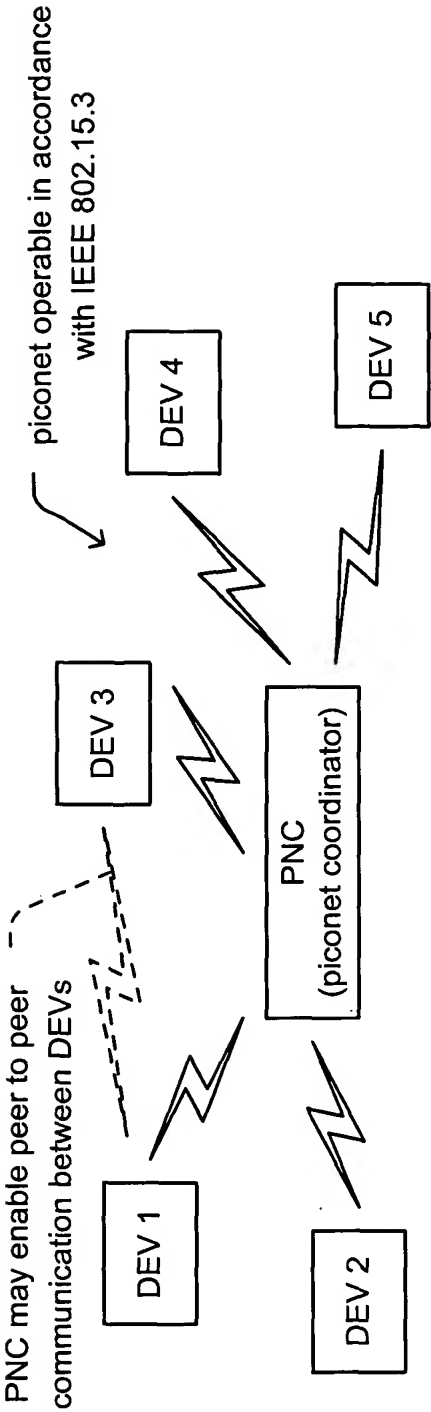
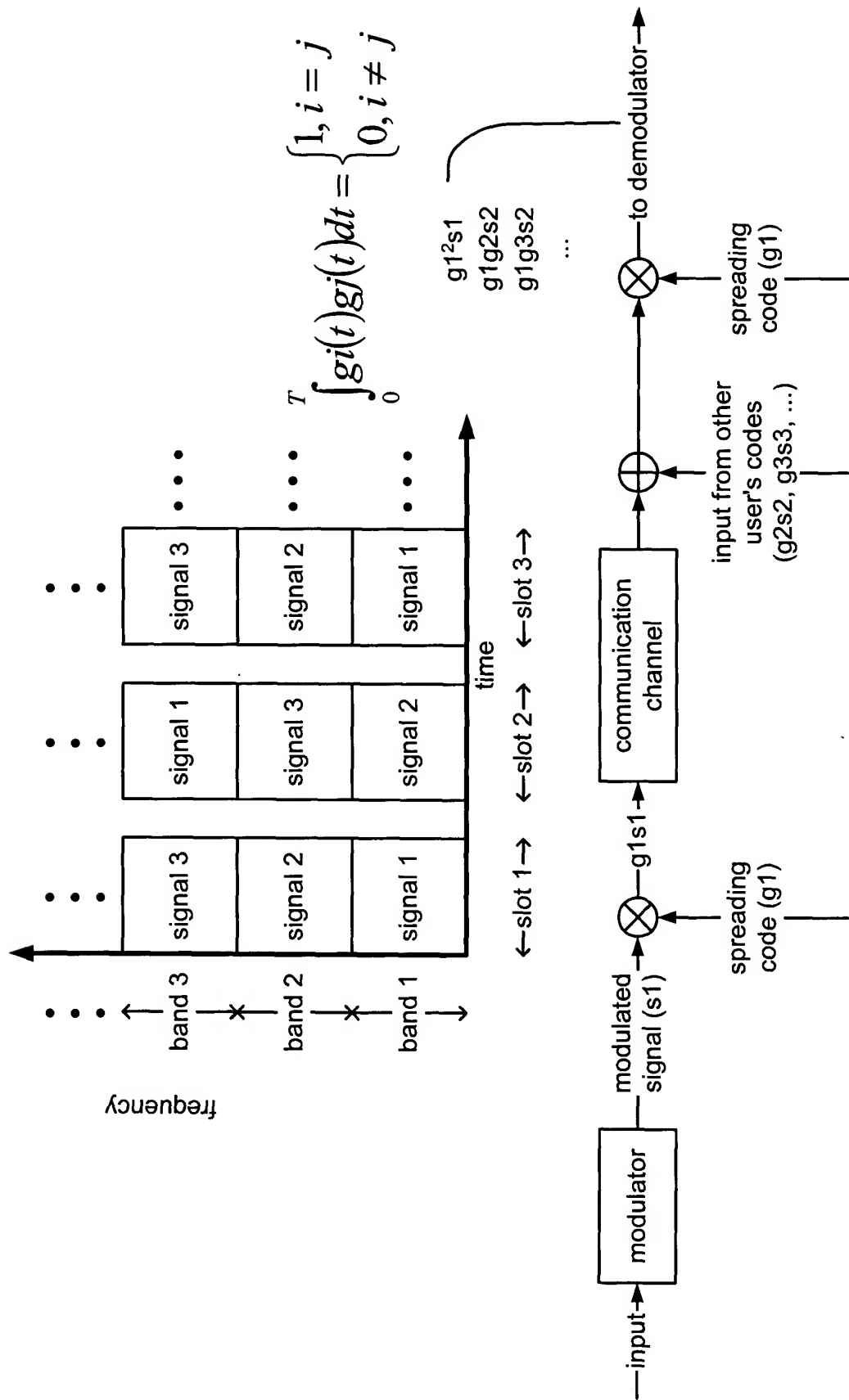


Fig. 1B



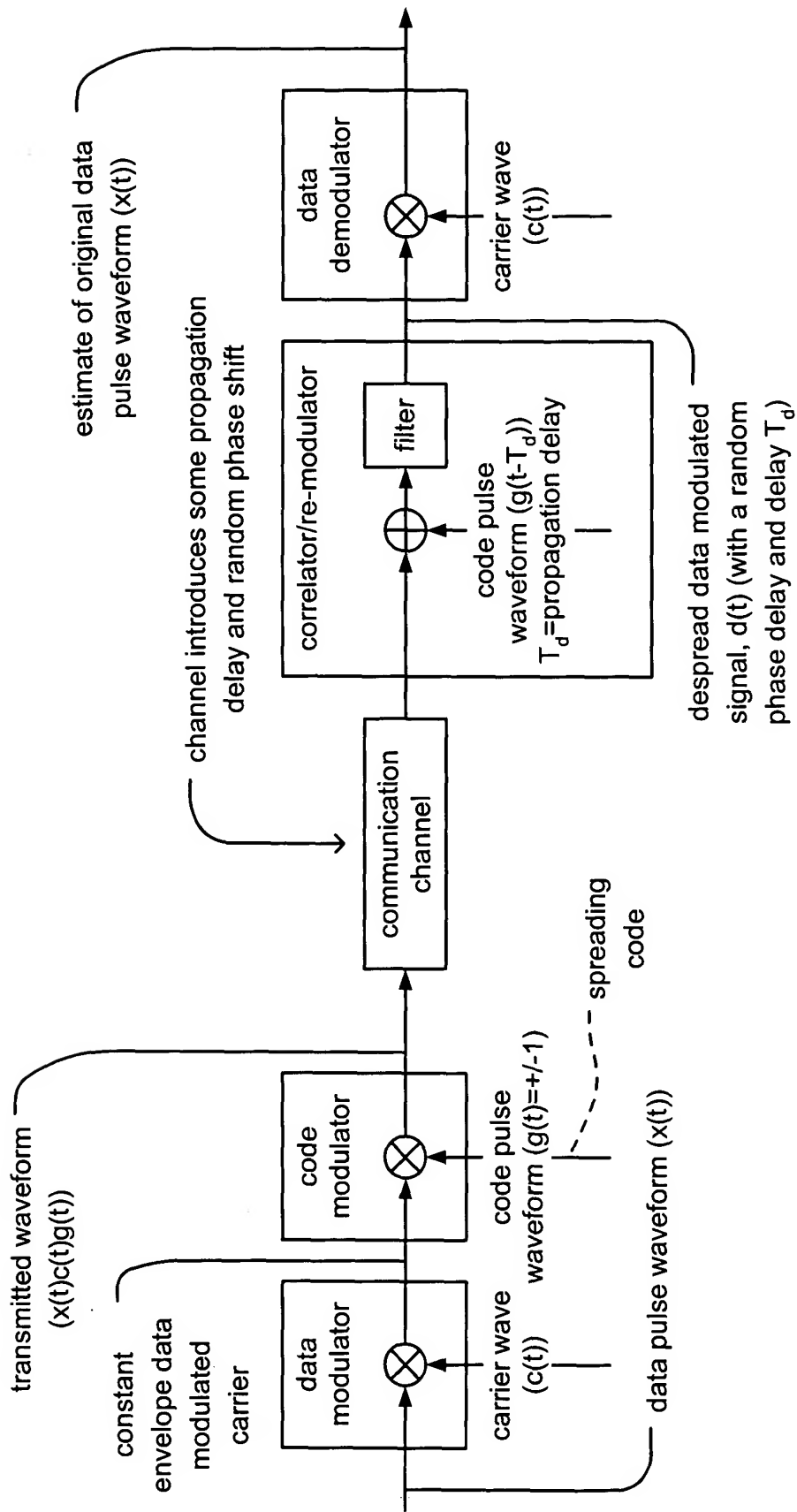
piconet (shown in wireless communication system embodiment)

Fig. 2



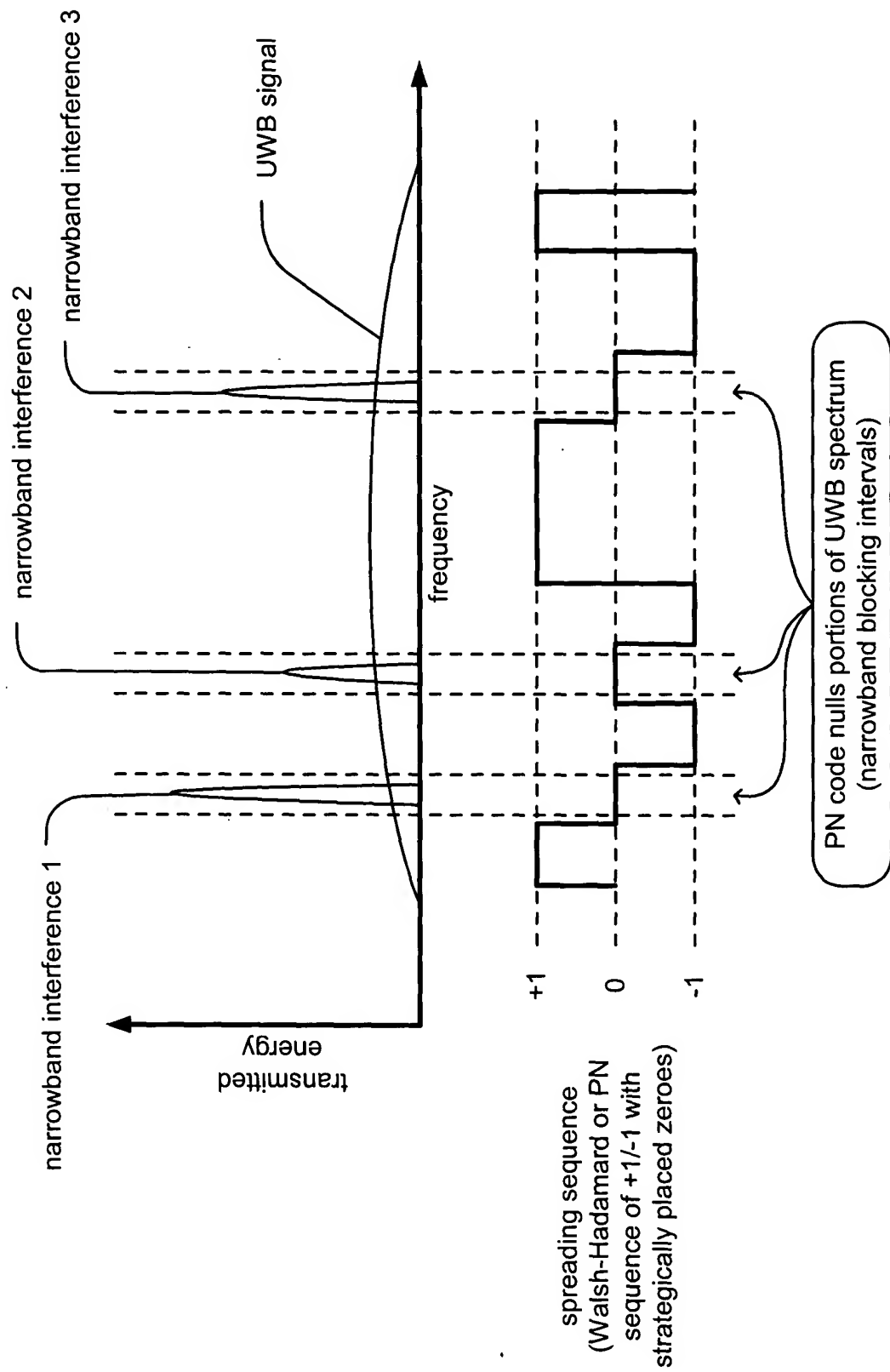
CDMA (Code Division Multiple Access)

Fig. 3



DSSS (Direct Sequence Spread Spectrum)

Fig. 4



PN (Pseudo Noise) code selectively nulling out narrowband interference within a UWB signal

Fig. 5

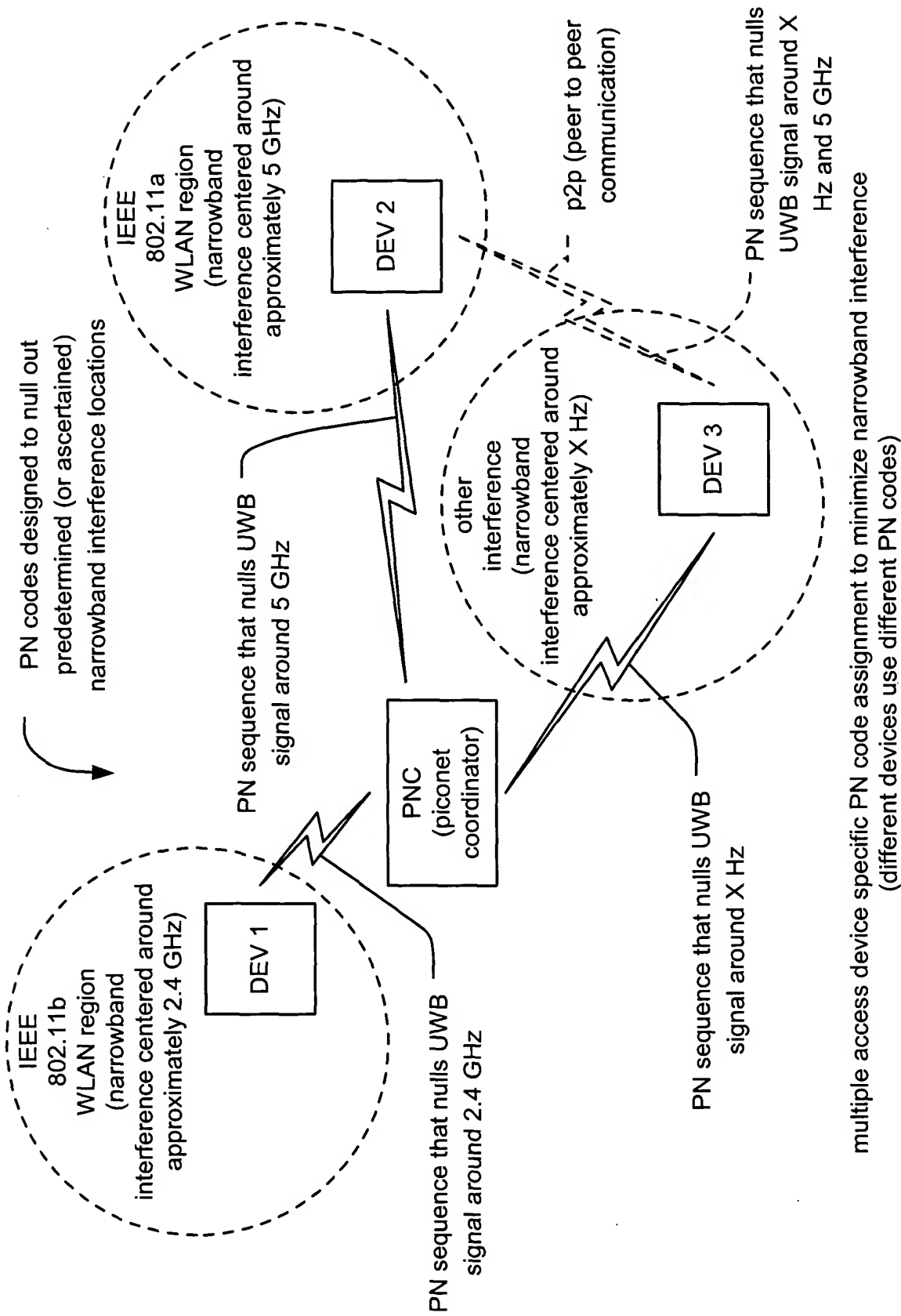


Fig. 6

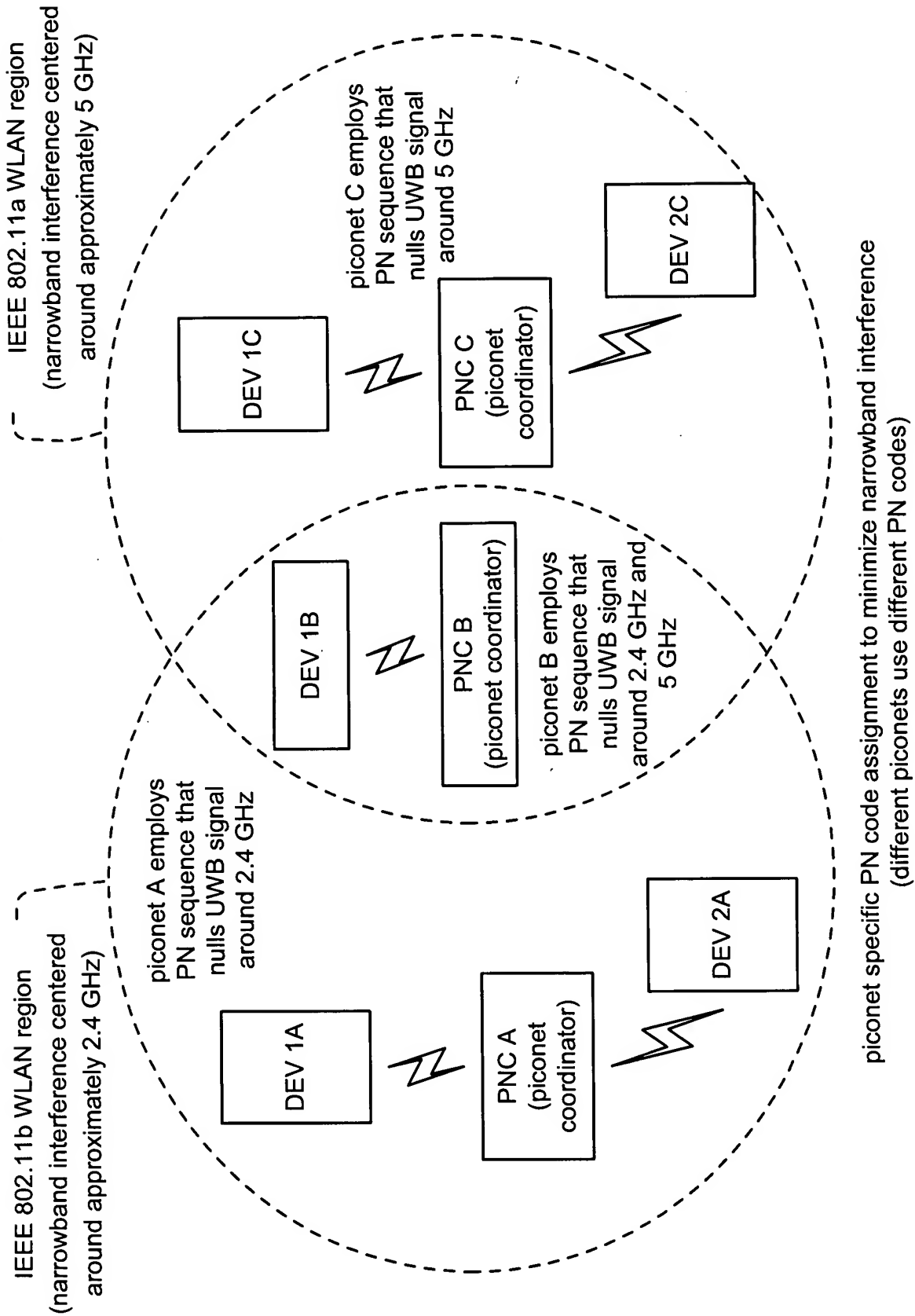
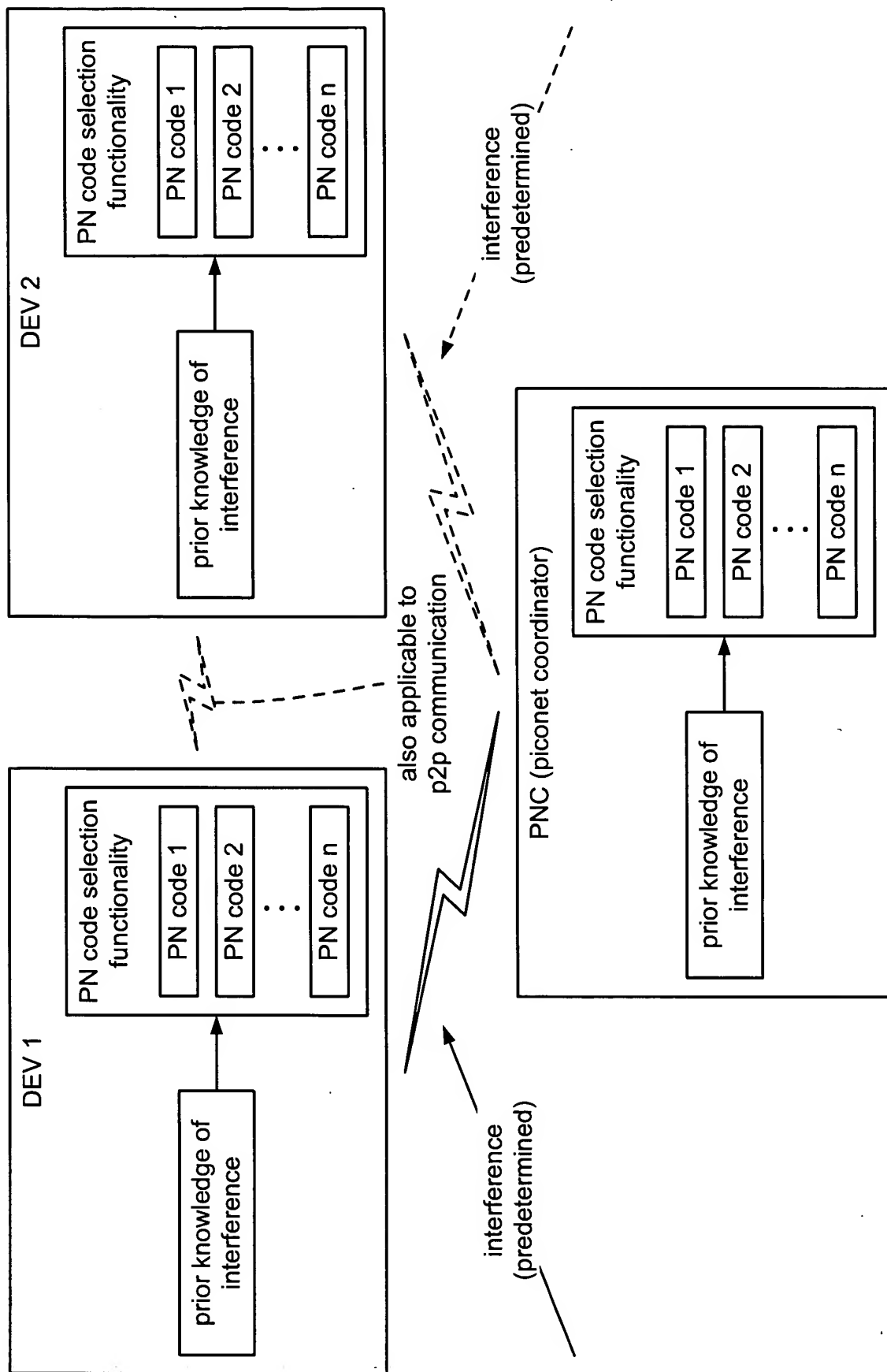
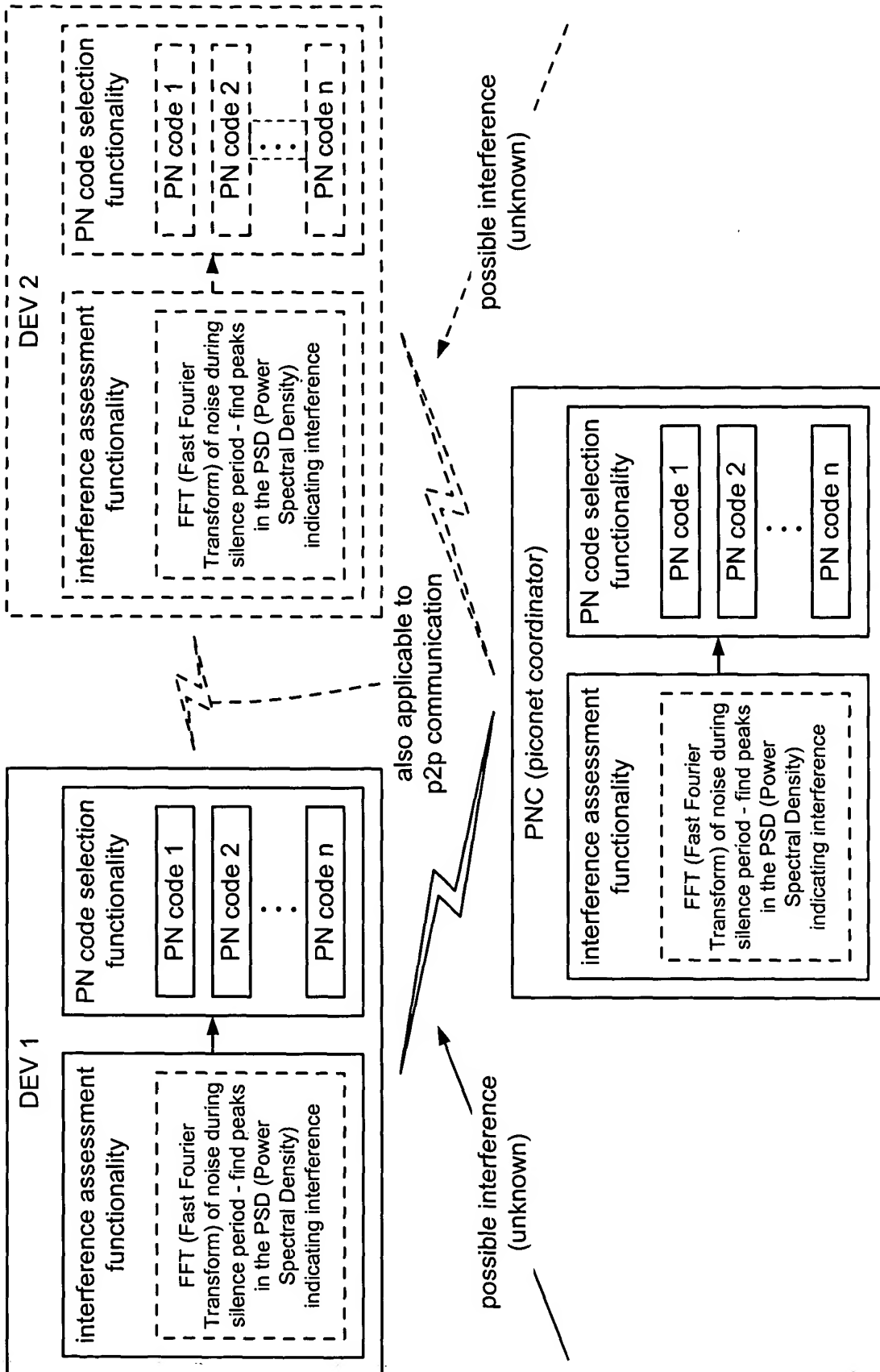


Fig. 7



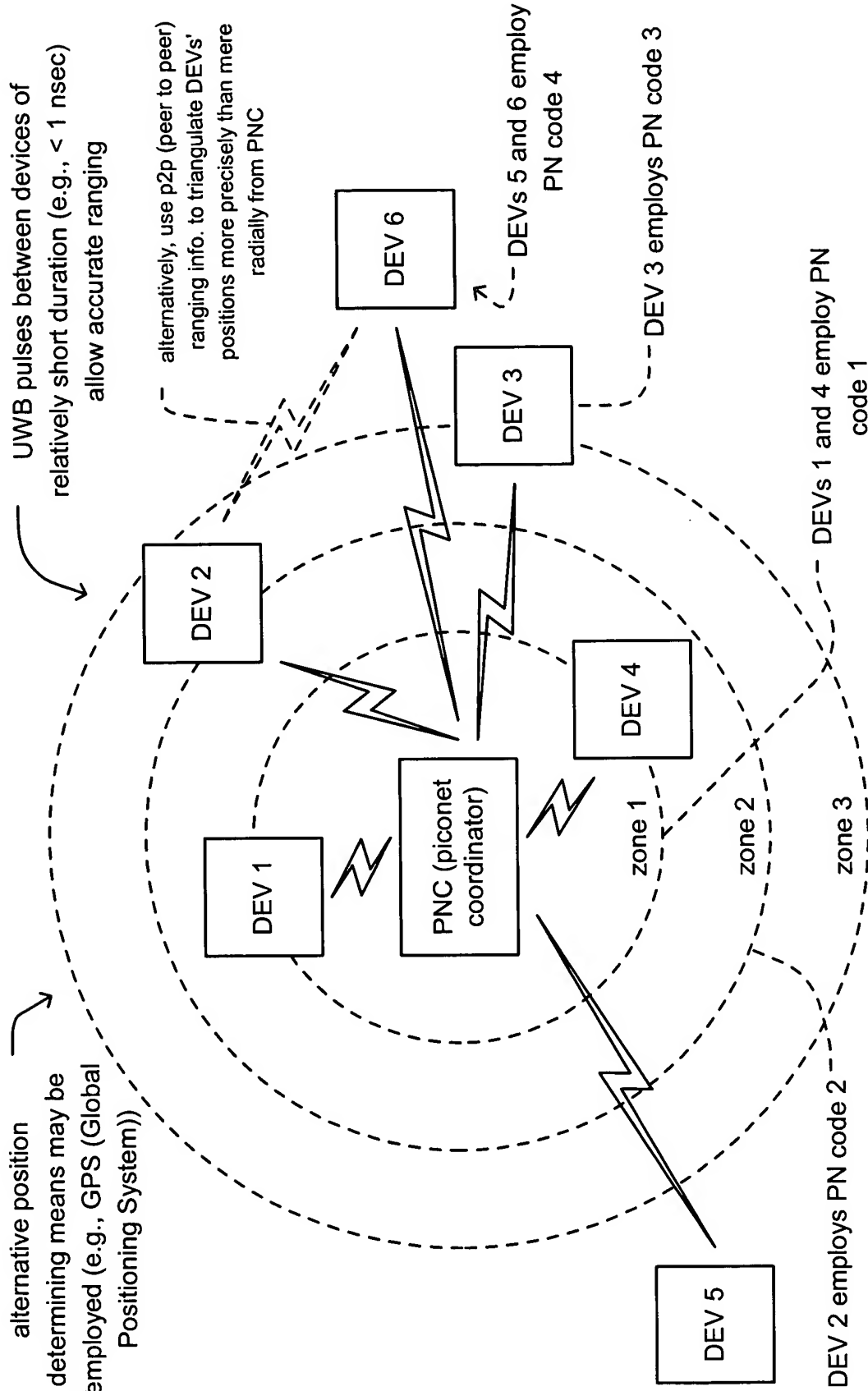
piconet performing PN code assignment using prior knowledge of interference

Fig. 8



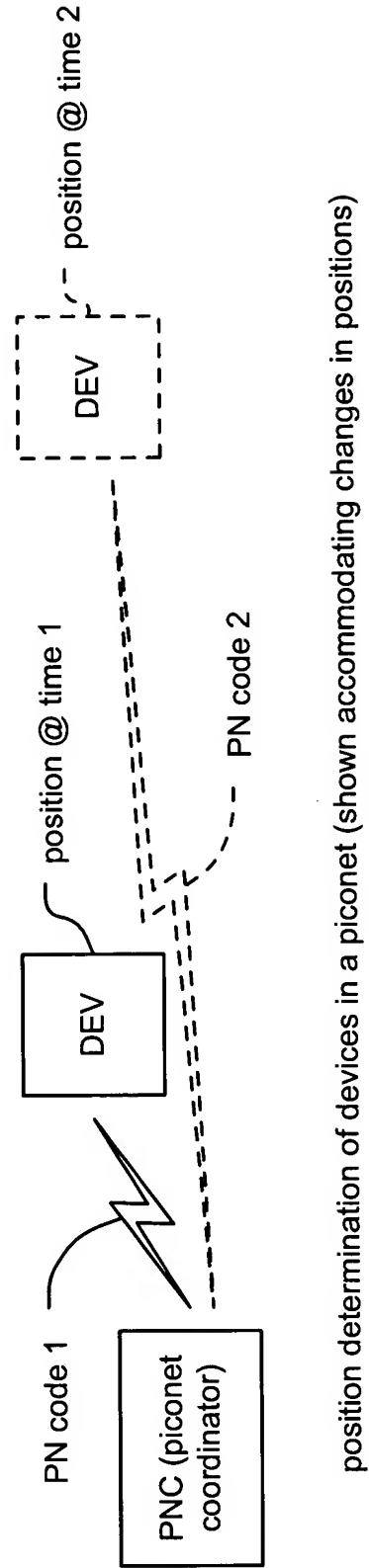
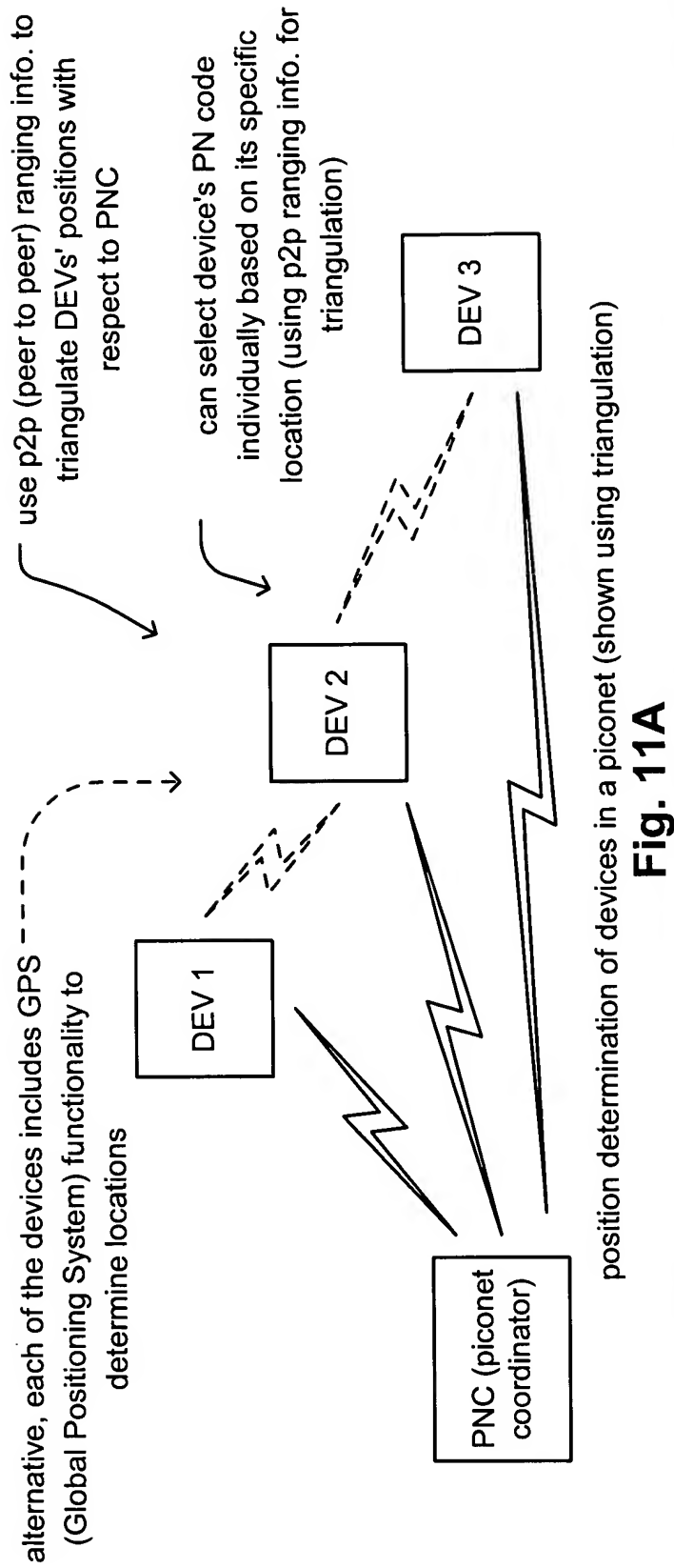
piconet performing PN code assignment using interference assessment

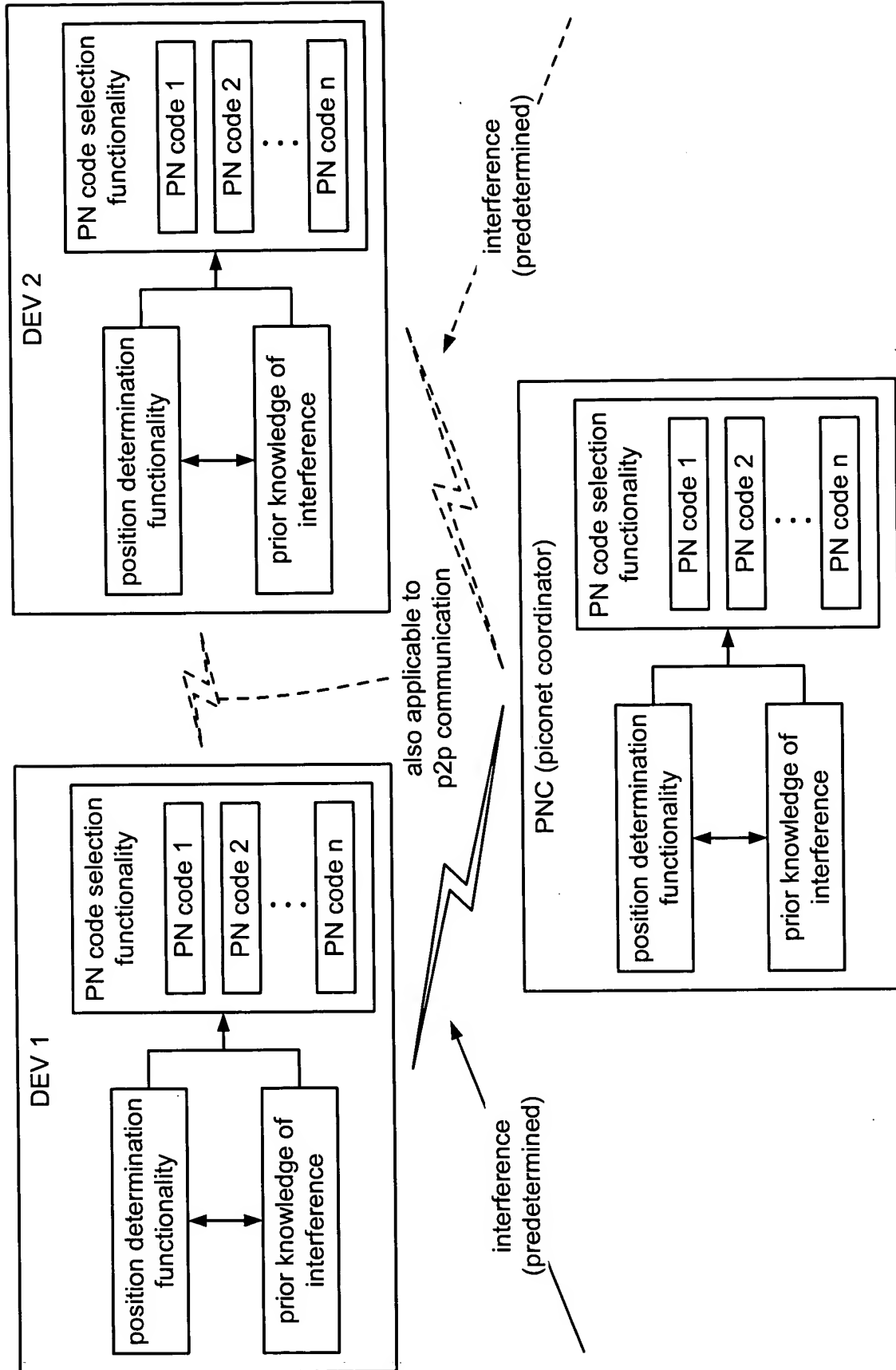
Fig. 9



position determination of devices in a piconet (shown in a radial embodiment)

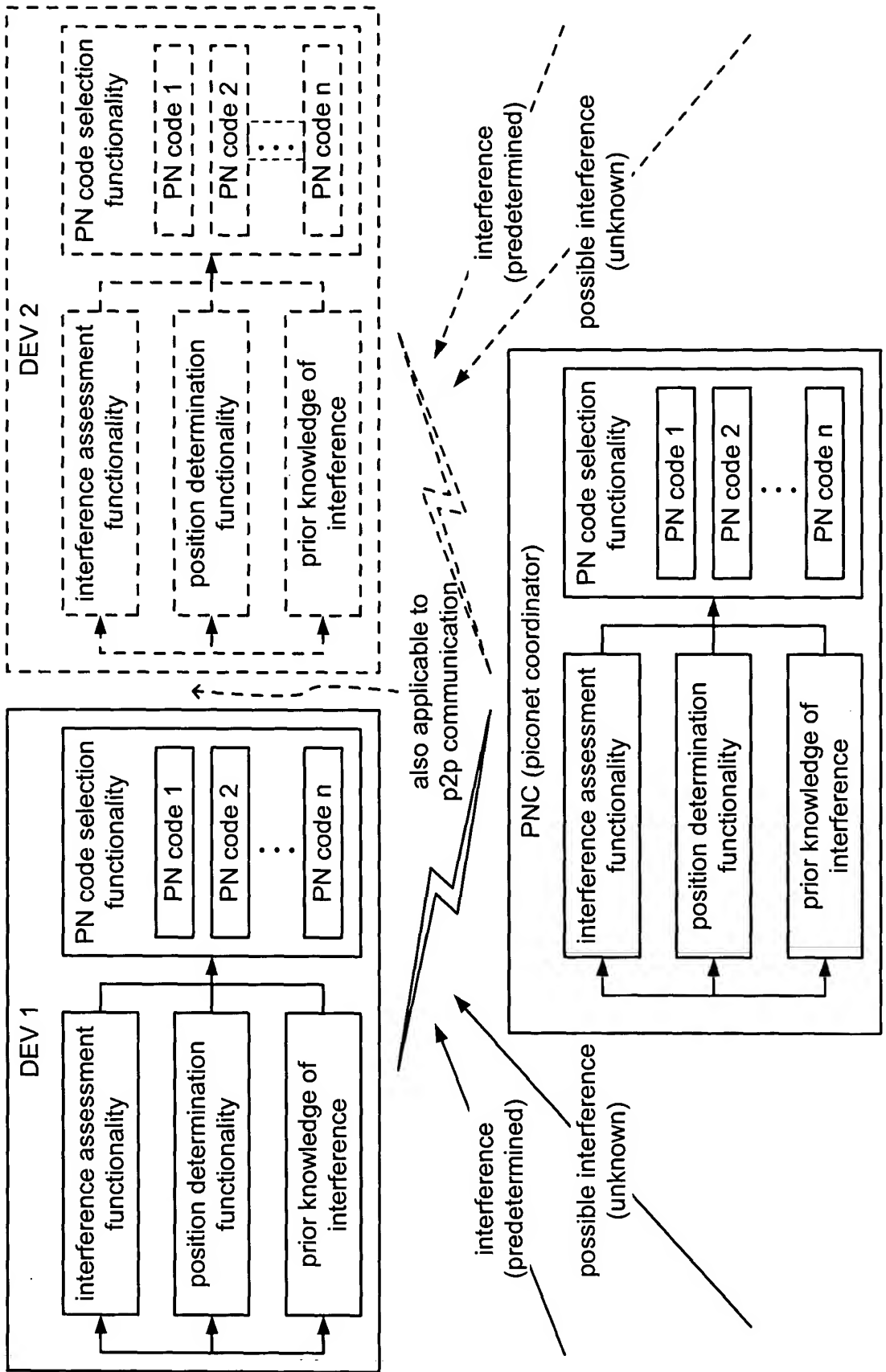
Fig. 10





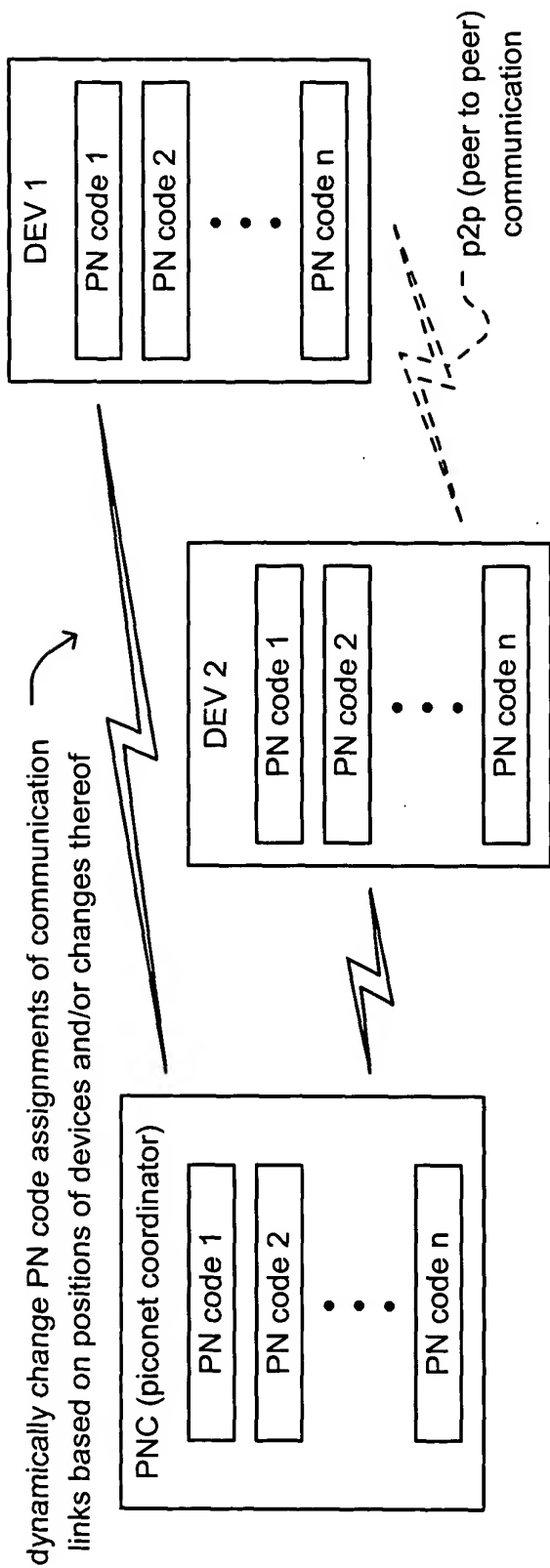
piconet performing PN code assignment using prior knowledge of interference and position determination

Fig. 12



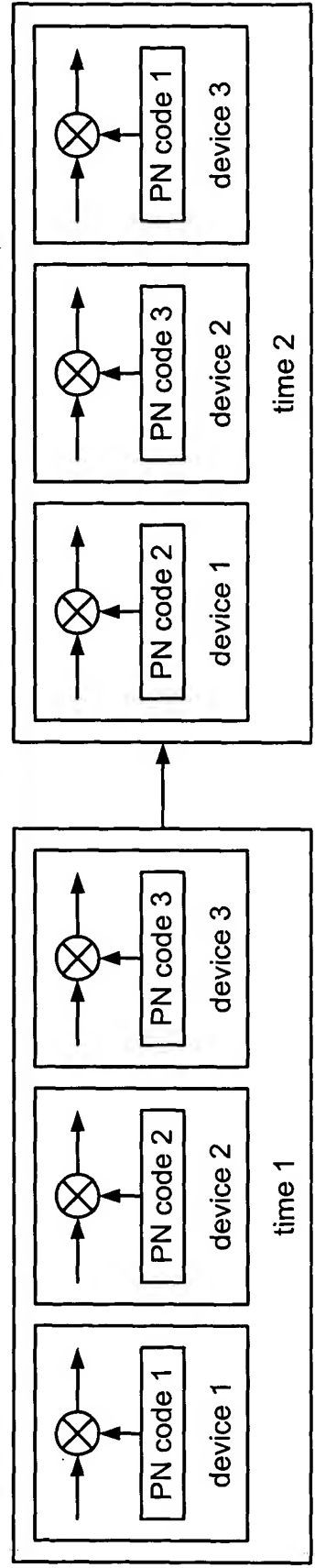
piconet performing PN code assignment using prior knowledge of interference, position determination, and interference assessment

Fig. 13



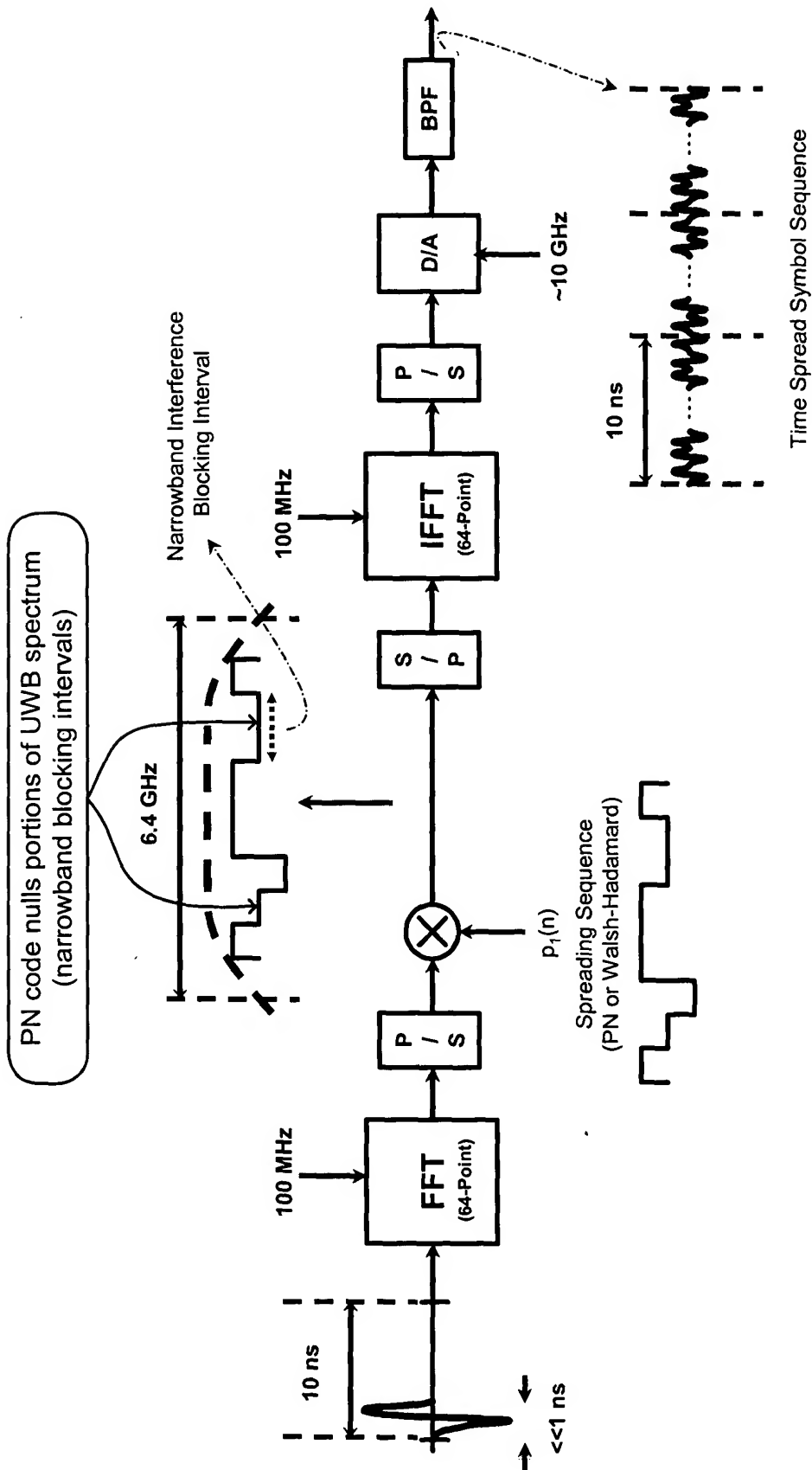
dynamic re-assignment of PN codes within piconet (using finite set of PN codes stored within devices)

Fig. 14A



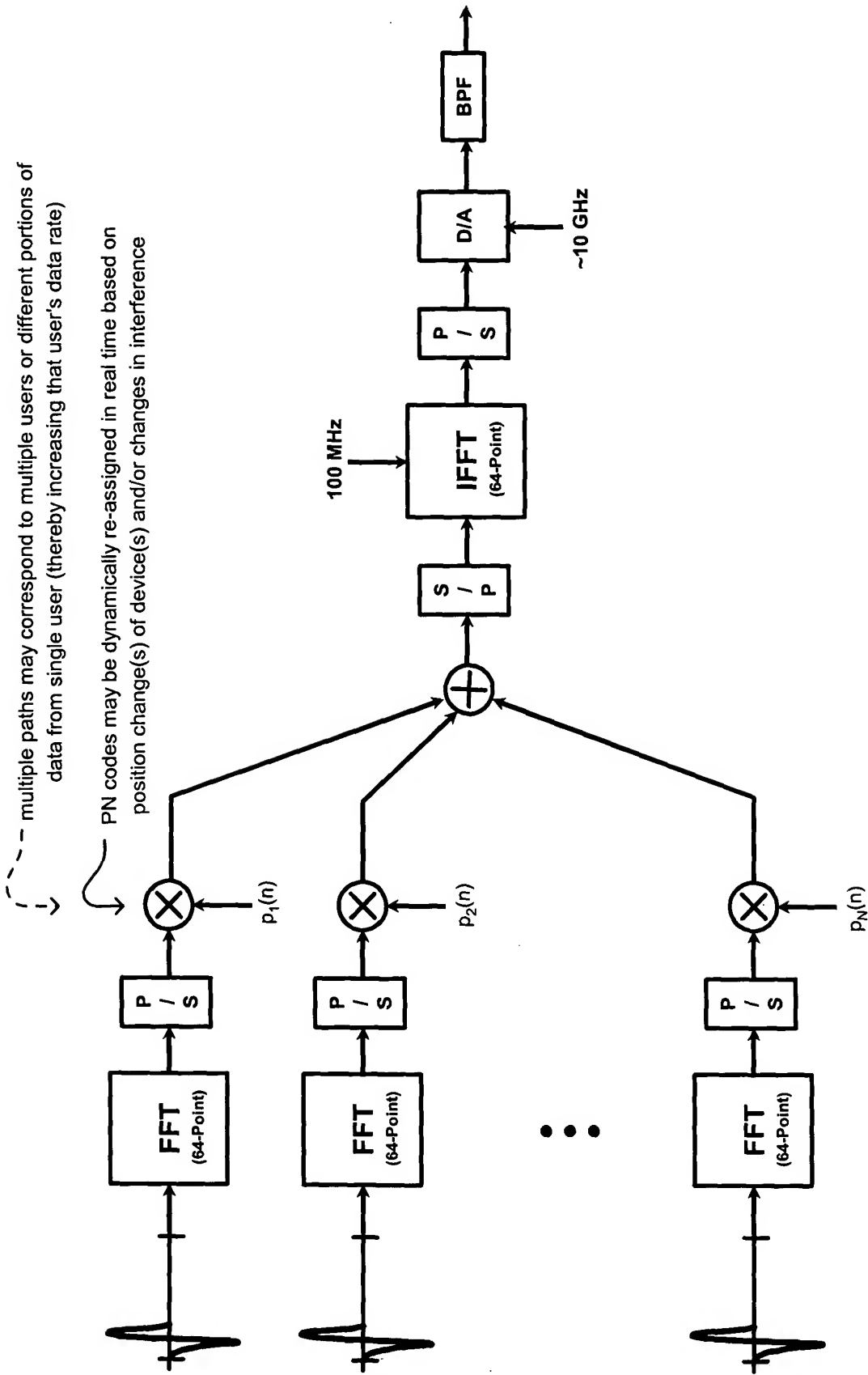
dynamic re-assignment of PN codes for multiple devices as a function of time

Fig. 14B



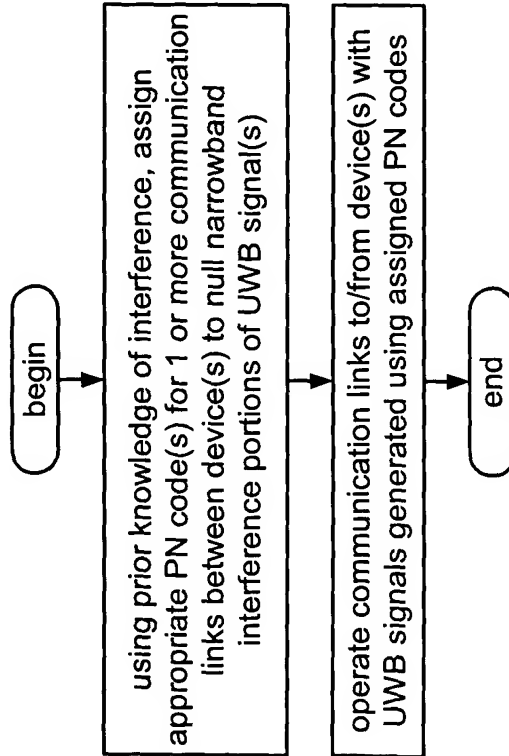
UWB (Ultra Wide Band) waveform design using DSSS (Direct Sequence Spread Spectrum)

Fig. 15

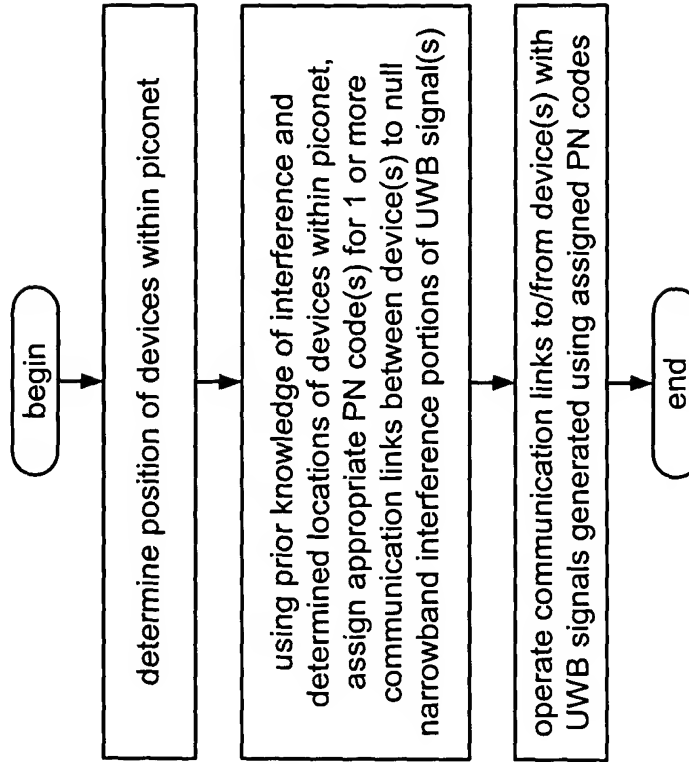


UWB (Ultra Wide Band) waveform design using CDMA (Code Division Multiple Access)

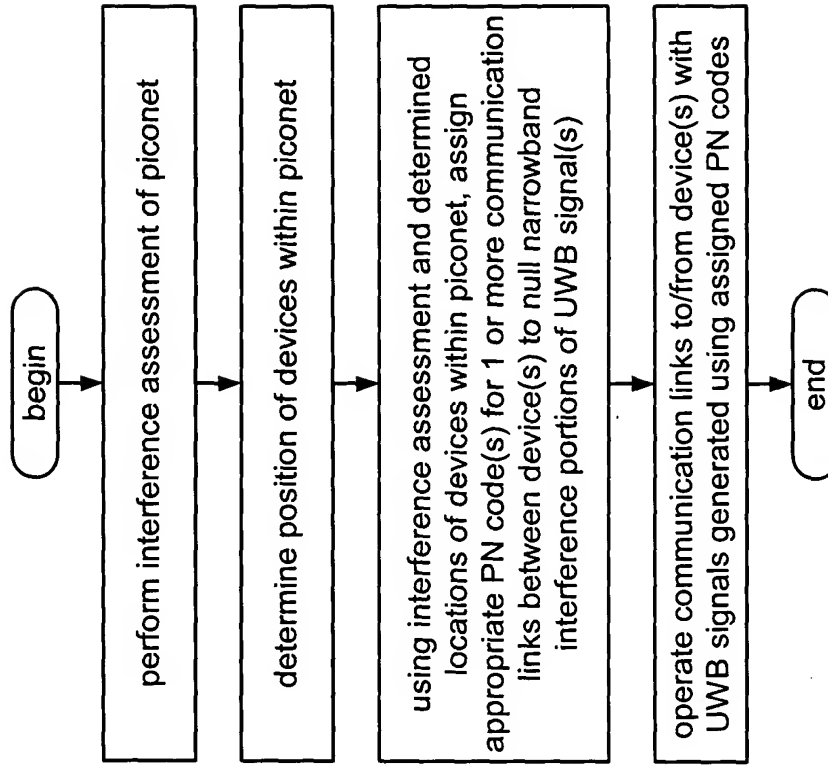
Fig. 16



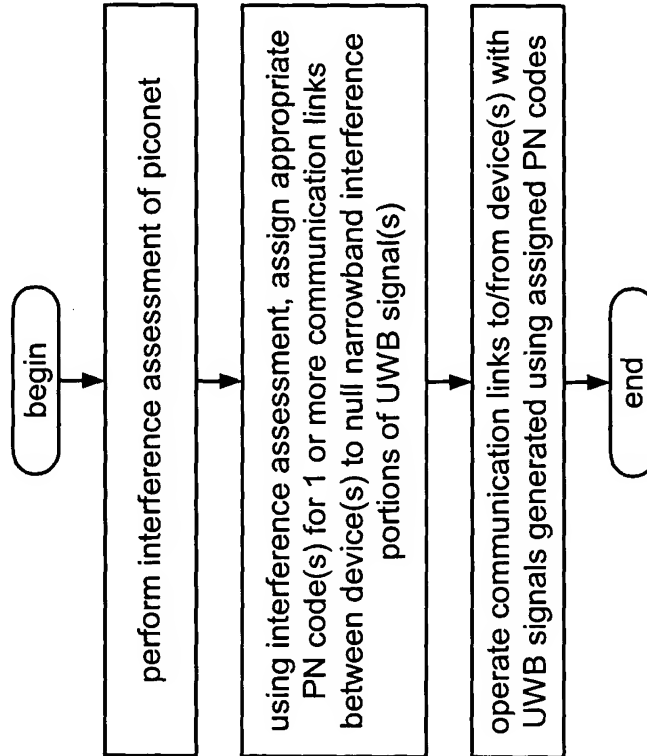
piconet operating method
Fig. 17A



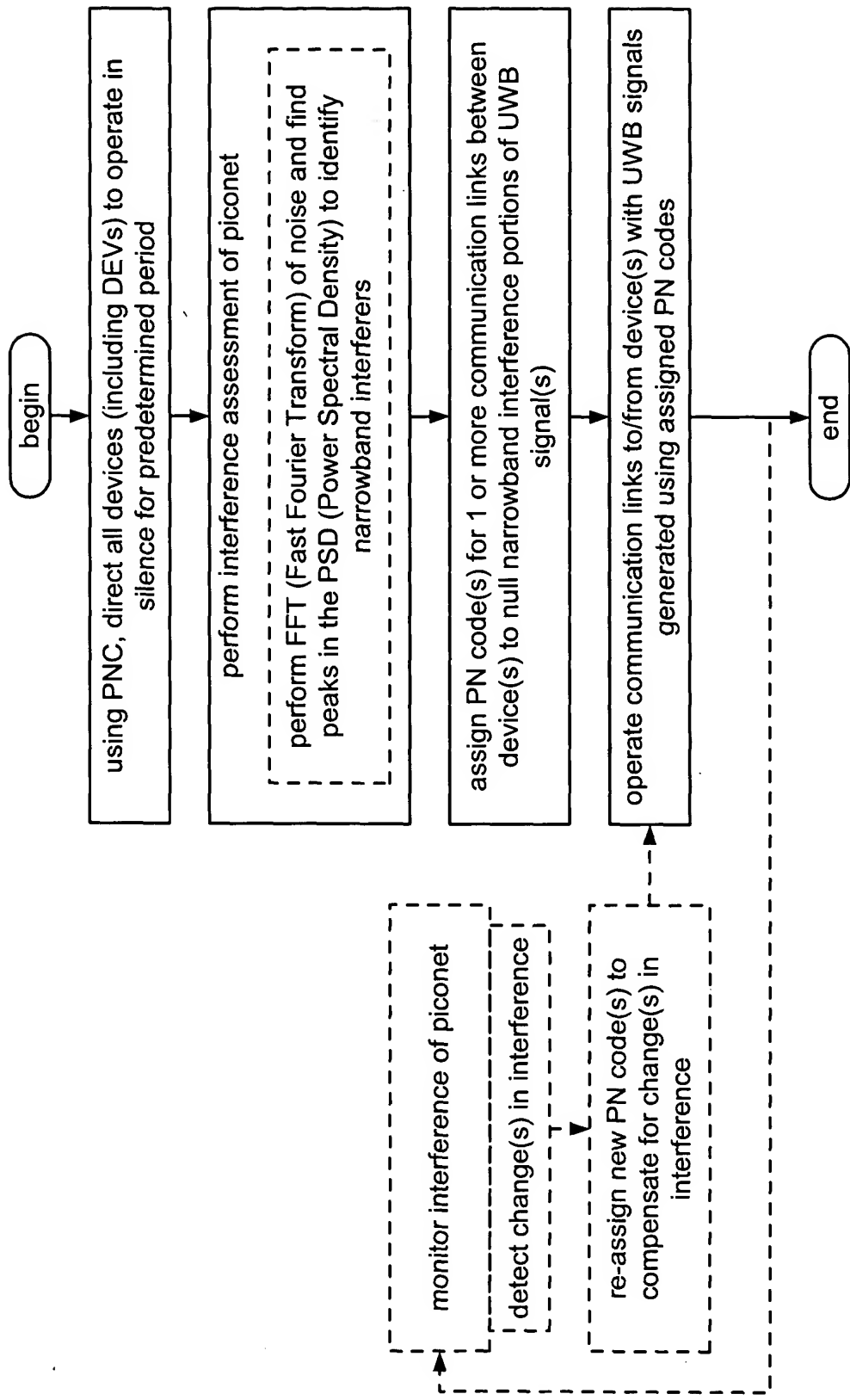
piconet operating method
Fig. 17B



piconet operating method
Fig. 18B

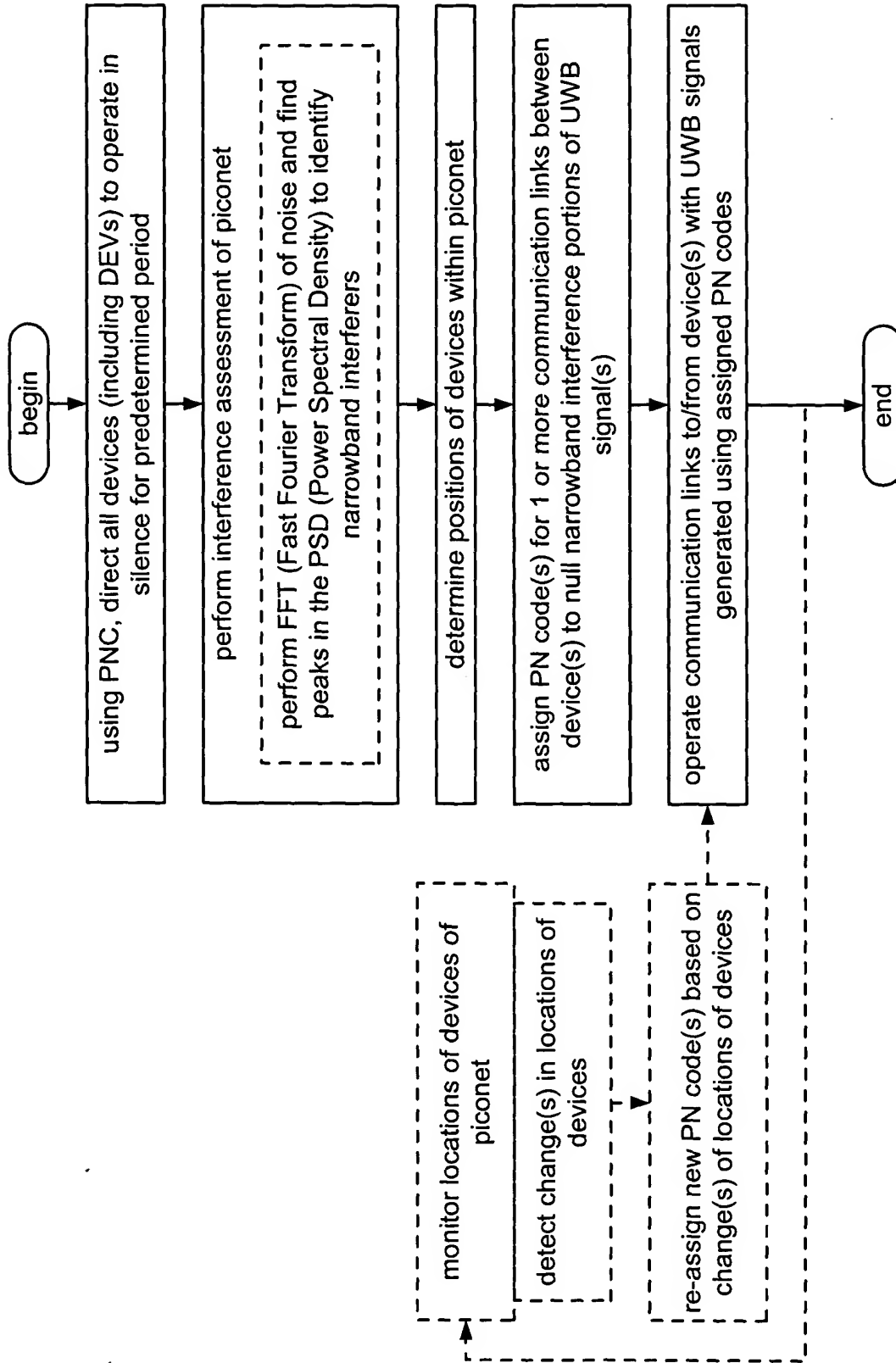


piconet operating method
Fig. 18A



piconet operating method

Fig. 19



piconet operating method

Fig. 20